

WHAT IS CLAIMED IS:

1. A method for identifying a hair growth modulating substance, comprising:
  - (a) contacting a peptide derived from SGK3 and a test substance suspected to modulate hair growth, under conditions allowing the binding of said test substance to said peptide, and
  - (b) determining, whether said test substance modulates an activity of said peptide.
2. The method of Claim 1, wherein said activity of said peptide is a kinase activity of said peptide.
3. The method of Claim 2, wherein said test substance inhibits the kinase activity of said peptide.
4. The method of Claim 2, wherein said test substance stimulates the kinase activity of said peptide.
5. A method for preparing a pharmaceutical/cosmetic composition for a treatment of a hair growth disorder, comprising:
  - (a) providing a hair growth modulating substance identified by the method of Claim 1, and
  - (b) formulating said substance into a pharmaceutically/cosmetically acceptable carrier.
6. The method of Claim 5, wherein said hair growth disorder is selected from the group consisting of: hair loss, baldness, unwanted hair growth, hypertrichosis, hirsutism, alopecia androgenetica, alopecia areata, alopecia areata universalis, and alopecia atrophicans.
7. The method of Claim 6, wherein said hair loss is induced by chemotherapy.
8. The method of Claim 6, wherein said baldness is a male pattern baldness.
9. A method for treating a human being affected by a hair growth disorder, comprising administering a hair growth modulating substance identified by the method of Claim 1.
10. The method of Claim 9, wherein said hair growth disorder is selected from the group consisting of: hair loss; baldness; unwanted hair growth, hypertrichosis, hirsutism; alopecia androgenetica; alopecia areata; alopecia areata universalis; and alopecia atrophicans.

11. The method of Claim 10, wherein said hair loss is induced by chemotherapy.
12. The method of Claim 10, wherein said baldness is a pattern baldness.
13. A hair growth modulating substance identified by the method of Claim 1.
14. The substance of Claim 13 that inhibits the activity of said SGK3-derived peptide.
15. The substance of Claim 13 that stimulates the activity of said SGK3-derived peptide.
16. A method for identifying hair growth modulating substance, comprising:
  - (a) providing a transgenic non-human *sgk3*<sup>-/-</sup> animal,
  - (b) administering a test substance to said animal, and
  - (c) determining, whether said test substance modulates hair growth of said animal.
17. The method of Claim 16, wherein said animal is a mouse.
18. The method of Claim 16, wherein said administering is performed by applying the test substance onto the skin of the animal.
19. The method of Claim 16, wherein said administering is performed by local injections around and in an affected area.
20. The method of Claim 16, wherein said administering is performed by systemic dosage of the substance to the animal.
21. A method for preparing a pharmaceutical/cosmetic composition for treatment of hair growth disorders, comprising:
  - (a) providing a hair growth modulating substance according to the method of Claim 16, and
  - (b) formulating said substance into a pharmaceutically/cosmetically acceptable carrier.
22. The method of Claim 21, wherein said hair growth disorder is selected from the group consisting of: hair loss, baldness, unwanted hair growth, hypertrichosis, hirsutism, alopecia androgenetica, alopecia areata, alopecia areata universalis, and alopecia atrophicans.
23. The method of Claim 22, wherein said hair loss is induced by chemotherapy.
24. The method of Claim 22, wherein said baldness is a male pattern baldness.

25. A method for treating a human being affected by a hair growth disorder, comprising: administering hair growth modulating substance identified by the method of Claim 16.

26. The method of Claim 25, wherein said hair growth disorder is selected from the group consisting of: hair loss, preferably induced by chemotherapy; baldness, preferably male pattern baldness; hirsutism; unwanted hair growth, hypertrichosis, alopecia androgenetica; alopecia areata; alopecia areata universalis; and alopecia atrophicans.

27. The method of Claim 26, wherein said hair loss is induced by chemotherapy.

28. The method of Claim 26, wherein said baldness is a male pattern baldness.

29. A hair growth modulating substance identified by the method of Claim 16.

30. The substance of Claim 29 that inhibits the activity of said SGK3-derived peptide.

31. The substance of Claim 29 that stimulates the activity of said SGK3-derived peptide.

32. A transgenic non-human *sgk3*<sup>-/-</sup> animal for investigating hair growth disorders.

33. The animal of Claim 32, wherein said animal is a mouse.

34. A method for treating a human being affected by a hair growth disorder, comprising:

(a) providing a genetic construct coding for an antisense-*sgk3* probe and/or for an *sgk3*-RNAi and/or for a transdominant inhibitory SGK3, and

(b) introducing said construct into a human being by means of gene therapeutic methods.

35. The method of Claim 34, wherein said hair growth disorder is selected from the group consisting of: hair loss, baldness, unwanted hair growth, hypertrichosis, hirsutism, alopecia androgenetica, alopecia areata, alopecia areata universalis, and alopecia atrophicans.

36. The method of Claim 35, wherein said hair loss is induced by chemotherapy.

37. The method of Claim 35, wherein said baldness is a male pattern baldness.

38. The method of Claim 34, wherein said construct is selected from the group consisting of: naked DNA or cDNA, naked RNA, plasmid DNA, plasmid RNA, vector DNA, vector RNA, and a non-virulent/non-pathogenic virus.

39. A method for treating a human being affected by a hair growth disorder, comprising:

- (a) providing a genetic construct comprising a region coding for *sgk3*-derived segment under control of a promoter, and
- (b) introducing said construct into a human being by means of gene therapeutic methods for expression of SGK3.

40. The method of Claim 39, wherein said promoter is an inducible promoter.

41. The method of Claim 39, wherein said hair growth disorder is selected from the group consisting of: hair loss, baldness, unwanted hair growth, hypertrichosis, hirsutism, alopecia androgenetica, alopecia areata, alopecia areata universalis, and alopecia atrophicans.

42. The method of Claim 41, wherein said hair loss is induced by chemotherapy.

43. The method of Claim 41, wherein said baldness is a male pattern baldness.

44. The method of Claim 39, wherein said construct is selected from the group consisting of: naked DNA or cDNA, naked RNA, plasmid DNA, plasmid RNA, vector DNA, vector RNA, non-virulent/non-pathogenic virus, and a transformed bacteria.

45. A method for preparing a pharmaceutical composition for treatment of hair growth disorders, comprising:

- (a) providing a genetic construct coding for antisense-*sgk3*, and
- (b) formulating said construct into a pharmaceutically/cosmetically acceptable carrier.

46. The method of Claim 45, wherein said hair growth disorder is selected from the group consisting of: hair loss, baldness, hirsutism, unwanted hair growth, hypertrichosis, alopecia androgenetica, alopecia areata, alopecia areata universalis, and alopecia atrophicans.

47. The method of Claim 46, wherein said hair loss is induced by chemotherapy.

48. The method of Claim 46, wherein said baldness is a male pattern baldness.

49. A composition, comprising a substance which modulates the activity of SGK3.

50. The composition of Claim 49, further comprising a pharmaceutically acceptable carrier.

51. The composition of Claim 49, further comprising a cosmetically acceptable carrier.
52. A composition, comprising a substance which causes a modulation of the activity of an SGK3-derived peptide, said substance identified by the method of Claim 1.
53. The composition of Claim 52, further comprising a pharmaceutically acceptable carrier.
54. The composition of Claim 52, further comprising a cosmetically acceptable carrier.
55. A composition, comprising a substance which causes a modulation of the activity of an SGK3-derived peptide, said substance identified by the method of Claim 16.
56. The composition of Claim 55, further comprising a pharmaceutically acceptable carrier.
57. The composition of Claim 55, further comprising a cosmetically acceptable carrier.